

Test Name	In Range	Out Of Range	Reference Range	Lab
LIPID PANEL		9/2016		
CHOLESTEROL, TOTAL	172	154	125-200 mg/dL	RGA
HDL CHOLESTEROL	56	49	> OR = 40 mg/dL	RGA
TRIGLYCERIDES	91	72	<150 mg/dL	RGA
LDL-CHOLESTEROL	98	91	<130 mg/dL (calc)	RGA

Desirable range <100 mg/dL for patients with CHD or diabetes and <70 mg/dL for diabetic patients with known heart disease.

CHOL/HDL C RATIO	3.1		< OR = 5.0 (calc)	RGA
NON HDL CHOLESTEROL	116		mg/dL (calc)	RGA
Target for non-HDL cholesterol is 30 mg/dL higher than LDL cholesterol target.				

COMPREHENSIVE METABOLIC PANEL				RGA
GLUCOSE	90		65-99 mg/dL	

Fasting reference interval

UREA NITROGEN (BUN)	14		7-25 mg/dL	
CREATININE	1.19		0.60-1.35 mg/dL	
eGFR NON-AFR. AMERICAN	74		> OR = 60 mL/min/1.73m2	
eGFR AFRICAN AMERICAN	86		> OR = 60 mL/min/1.73m2	
BUN/CREATININE RATIO	NOT APPLICABLE		6-22 (calc)	
SODIUM	139		135-146 mmol/L	
POTASSIUM	4.2		3.5-5.3 mmol/L	
CHLORIDE	102		98-110 mmol/L	
CARBON DIOXIDE	31		20-31 mmol/L	
CALCIUM	9.2		8.6-10.3 mg/dL	
PROTEIN, TOTAL	7.1		6.1-8.1 g/dL	
ALBUMIN	4.6		3.6-5.1 g/dL	
GLOBULIN	2.5		1.9-3.7 g/dL (calc)	
ALBUMIN/GLOBULIN RATIO	1.8		1.0-2.5 (calc)	
BILIRUBIN, TOTAL	0.6		0.2-1.2 mg/dL	
ALKALINE PHOSPHATASE	44		40-115 U/L	
AST	21		10-40 U/L	
ALT	26		9-46 U/L	
HEMOGLOBIN A1c	5.0		<5.7 % of total Hgb	RGA

For the purpose of screening for the presence of diabetes:

- <5.7% Consistent with the absence of diabetes
- 5.7-6.4% Consistent with increased risk for diabetes (prediabetes)
- > or =6.5% Consistent with diabetes

This assay result is consistent with a decreased risk of diabetes.

Currently, no consensus exists regarding use of hemoglobin A1c for diagnosis of diabetes in children.

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According to American Diabetes Association (ADA) guidelines, hemoglobin A1c <7.0% represents optimal control in non-pregnant diabetic patients. Different metrics may apply to specific patient populations. Standards of Medical Care in Diabetes (ADA).

Test Name	In Range	Out Of Range	Reference Range	Lab
MAGNESIUM	2.0		1.5-2.5 mg/dL	RGA
URIC ACID	4.1		4.0-8.0 mg/dL	RGA
Therapeutic target for gout patients: <6.0 mg/dL				
CREATINE KINASE, TOTAL	122		44-196 U/L	RGA
TSH	1.89		0.40-4.50 mIU/L	RGA
T4, FREE	1.2		0.8-1.8 ng/dL	RGA
T3, FREE	3.3		2.3-4.2 pg/mL	RGA
CBC (INCLUDES DIFF/PLT)				RGA
WHITE BLOOD CELL COUNT	6.3		3.8-10.8 Thousand/uL	
RED BLOOD CELL COUNT	5.55		4.20-5.80 Million/uL	
HEMOGLOBIN	16.5		13.2-17.1 g/dL	
HEMATOCRIT	49.6	49.7	38.5-50.0 %	
MCV	89.4		80.0-100.0 fL	
MCH	29.7		27.0-33.0 pg	
MCHC	33.3		32.0-36.0 g/dL	
RDW	13.2		11.0-15.0 %	
PLATELET COUNT	182		140-400 Thousand/uL	
MPV	8.2		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	3560		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	2155		850-3900 cells/uL	
ABSOLUTE MONOCYTES	416		200-950 cells/uL	
ABSOLUTE EOSINOPHILS	151		15-500 cells/uL	
ABSOLUTE BASOPHILS	19		0-200 cells/uL	
NEUTROPHILS	56.5		%	
LYMPHOCYTES	34.2		%	
MONOCYTES	6.6		%	
EOSINOPHILS	2.4		%	
BASOPHILS	0.3		%	
URINALYSIS, COMPLETE				RGA
COLOR	YELLOW		YELLOW	
APPEARANCE	CLEAR		CLEAR	
SPECIFIC GRAVITY	1.008		1.001-1.035	
PH	7.0		5.0-8.0	
GLUCOSE	NEGATIVE		NEGATIVE	
BILIRUBIN	NEGATIVE		NEGATIVE	
KETONES	NEGATIVE		NEGATIVE	
OCCULT BLOOD	NEGATIVE		NEGATIVE	
PROTEIN	NEGATIVE		NEGATIVE	
NITRITE	NEGATIVE		NEGATIVE	
LEUKOCYTE ESTERASE	NEGATIVE		NEGATIVE	
WBC	NONE SEEN		< OR = 5 /HPF	
RBC	NONE SEEN		< OR = 2 /HPF	
SQUAMOUS EPITHELIAL CELLS	NONE SEEN		< OR = 5 /HPF	
BACTERIA	NONE SEEN		NONE SEEN /HPF	
HYALINE CAST	NONE SEEN		NONE SEEN /LPF	
DHEA SULFATE	212		70-495 mcg/dL	IG

DHEA-S values fall with advancing age.

Test Name In Range Out Of Range Reference Range Lab  
 For reference, the reference intervals for 31-40 year old patients are:

Male: 106-464 mcg/dL  
 Female: 23-266 mcg/dL

INSULIN 4.2 2.0-19.6 uIU/mL IG  
 This insulin assay shows strong cross-reactivity for some insulin analogs (lispro, aspart, and glargine) and much lower cross-reactivity with others (detemir, glulisine).

ESTRADIOL 53 H 88 < OR = 39 pg/mL RGA  
 Reference range established on post-pubertal patient population. No pre-pubertal reference range established using this assay. For any patients for whom low Estradiol levels are anticipated (e.g. males, pre-pubertal children and hypogonadal/post-menopausal females), the Quest Diagnostics Nichols Institute Estradiol, Ultrasensitive, LCMSMS assay is recommended (order code 30289).

Please note: patients being treated with the drug fulvestrant (Faslodex(R)) have demonstrated significant interference in immunoassay methods for estradiol measurement. The cross reactivity could lead to falsely elevated estradiol test results leading to an inappropriate clinical assessment of estrogen status. Quest Diagnostics order code 30289-Estradiol, Ultrasensitive LC/MS/MS demonstrates negligible cross reactivity with fulvestrant.

PSA (FREE AND TOTAL) 1.1 0.8 < OR = 4.0 ng/mL IG  
 PSA, TOTAL 0.2 0.2 ng/mL  
 PSA, FREE 18 L 25L >25 % (calc)  
 PSA, % FREE

PSA (ng/mL)	Free PSA(%)	Estimated(x) Probability of Cancer(as%)
0-2.5	(*)	Approx. 1
2.6-4.0 (1)	0-27 (2)	24 (3)
4.1-10 (4)	0-10	56
	11-15	28
	16-20	20
	21-25	16
	>or =26	8
>10 (+)	N/A	>50

References: (1)Catalona et al.:Urology 60: 469-474 (2002)  
 (2)Catalona et al.:J.Urol 168: 922-925 (2002)  
 Free PSA(%) Sensitivity(%) Specificity(%)  
 < or = 25 85 19  
 < or = 30 93 9  
 (3)Catalona et al.:JAMA 277: 1452-1455 (1997)  
 (4)Catalona et al.:JAMA 279: 1542-1547 (1998)

(x)These estimates vary with age, ethnicity, family history and DRE results.

Test Name	In Range	Out Of Range	Reference range
(*) The diagnostic usefulness of % Free PSA has not been established in patients with total PSA below 2.6 ng/mL			
(+) In men with PSA above 10 ng/mL, prostate cancer risk is determined by total PSA alone.			

The Total PSA value from this assay system is standardized against the equimolar PSA standard. The test result will be approximately 20% higher when compared to the WHO-standardized Total PSA (Siemens assay). Comparison of serial PSA results should be interpreted with this fact in mind.

PSA was performed using the Beckman Coulter Immunoassay method. Values obtained from different assay methods cannot be used interchangeably. PSA levels, regardless of value, should not be interpreted as absolute evidence of the presence or absence of disease.

TESTOSTERONE, FR (DIALYSIS)  
AND TOTAL (LC/MS/MS)

SLI

TESTOSTERONE, TOTAL, LC/MS/MS	1632 H	1788	250-1100 ng/dL
FREE TESTOSTERONE	302.2 H	421	35.0-155.0 pg/mL

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Valencia. It has not been cleared or approved by the US Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Test Name	Result	Reference Range	
VITAMIN D,25-OH,TOTAL,IA	57	30-100 ng/mL	RGA

Vitamin D Status                      25-OH Vitamin D:

Deficiency:                                      <20 ng/mL  
 Insufficiency:                                      20 - 29 ng/mL  
 Optimal:    > or = 30 ng/mL

For 25-OH Vitamin D testing on patients on D2-supplementation and patients for whom quantitation of D2 and D3 fractions is required, the QuestAssureD(TM) 25-OH VIT D, (D2,D3), LC/MS/MS is recommended: order code 92888 (patients >2yrs).

For more information on this test, go to:  
<http://education.questdiagnostics.com/faq/FAQ163>  
 (This link is being provided for informational/educational purposes only.)

Physician Comments:

**PERFORMING SITE:**

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**LIST OF RESULTS PRINTED IN THE OUT OF RANGE COLUMN:**

ESTRADIOL    53 H                                      < OR = 39 pg/mL                                      RGA

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PSA, % FREE    18 L                                      >25 % (calc)                                      IG

PSA (ng/mL)	Free PSA (%)	Estimated(x) Probability of Cancer(as%)
0-2.5	(*)	Approx. 1

CLIENT SERVICES: 866.697.8378

SPECIMEN: DL301273Q

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